

WHAT IS CLAIMED IS:

1. A method for manufacturing a fabric from yarns, fibers or filaments, including first elementary filaments of a first polymer and second elementary filaments of a second polymer, the method comprising:

receiving the yarns, fibers or filaments, from a common spinneret;

forming the yarns, fibers or filaments into a single first fabric;

compressing the first fabric to a density of at least 10% of a density of the first polymer, the compressing being performed at a temperature between a glass transition temperature and a melting temperature of the first polymer; and

subsequently applying a further mechanical force so as to cause an at least partial splitting of the yarns, fibers or filaments into the first and second elementary filaments.

2. The method as recited in claim 1, wherein the applying of the further mechanical force is performed at a temperature of at least 10°C below a melting temperature of the first polymer.

3. The method as recited in claim 2, wherein the melting temperature of the first polymer is equal to or lower than a melting temperature of the second polymer.

4. The method as recited in claim 1, wherein the compressing is performed to a density of at least 15% of the density of the first polymer.

5. The method as recited in claim 1, wherein the compressing is performed using a roll calender.

6. The method as recited in claim 1, wherein the applying of the further mechanical force includes applying a hydrofluid treatment at a pressure of 120 to 500 bar.

7. The method as recited in claim 1, wherein the first and second elementary filaments are elementary microfilaments.

8. The method as recited in claim 1, wherein the yarns, fibers or filaments include melt-spun filaments.
9. The method as recited in claim 1, wherein the yarns, fibers or filaments include staple fibers.
10. The method as recited in claim 1, wherein the first and second elementary filaments are micro-elementary filaments and the first and second polymers are compatible polymer pairs.
11. The method as recited in claim 10, wherein the first and second polymers are selected from the group consisting of: polyethylene/polypropylene; polyethylene terephthalate/polybutylene terephthalate; polyethylene terephthalate/polytrimethylene terephthalate; polyethylene terephthalate/recycled polyester; polyethylene terephthalate/polylactate; polyester/copolyester; polyamide/copolyamide; polyamide 6/polyamide 66; and polyamide 6/polyamide 12.
12. The method as recited in claim 1, wherein the first and second elementary fibers include micro-elementary filaments and the first and second polymers are incompatible polymer pairs.
13. The method as recited in claim 12, wherein the first and second polymers are selected from the group consisting of: polyester/polyamide; copolyester/copolyamide; polyethylene terephthalate/polyamide; and recycled polyester/polyamide.